colorspace

Version 1.0.0

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This package is essentially a reworking of the previous attempts to provide spot colors and other additional features by Jens Elstner, Stephan Lehmke and Siep Kroonenberg (with some inspiration from ConTeXt, too). It requires xcolor, which is loaded if it has not been before.

It provides a clean user interface, with a single command for defining a spot color. It seems to work with tikz. Currently only pdftex and luatex are supported. Mixing spot colors (with process colors or other spots colors) and other functions related to the PDF color spaces (like indexed colors) are not yet suported, but they are under study.

Those docs, like the package itself, are still somewhat tentative, but the basic behaviour described here will be preserved in future versions.

For transparencies, see transparent, by Heiko Oberdiek.

1 Spot colors

Write, for example:

\definespotcolor{foo}{BarTone 555 GN}{.3,.4,.5,.6}

That's all. Here foo is the LATEX name, as used in \color and the like, BarTone 555 GN is the PDF name (multiple spaces are collapsed into one) as shown by PDF readers, and the four numbers are the CMYK equivalent. LATEX knows nothing about the PDF name, which is just a string to be written to the generated file, while the PDF knows nothing about the LATEX name.

You can use tints as usual in xcolor, like:

\color{foo!60}
\colorlet{foo60}{foo!60}

and even set tints from other tints, but this is the only operation currently supported. Something like spot!10!black (mixing inks) does not work.

The special PDF names All (for all plates) and None work as expected:

```
\definespotcolor{registration}{All}{1,1,1,1}
```

Internally, only CMYK is used, but you can define the equivalent color with another name space, which is then converted:

```
\definespotcolor{foo}{BarTone 555 GN}[rgb]{.5, .4, .3}
```

To change the color space for a page and the subsequent ones, you can set something like:

```
\pagecolorspace{name1,name2,name3}
```

(It can be empty.) To return to the default color space, which contains all the defined spot colors, use \resetpagecolorspace.

2 Overprinting

This is usually a pre-print task, but by setting it in the document you will get a better idea of how the colors are actually overlapped. However, remember the effect produced is device-dependent, and colorant overprint decisions should be made at output time (according to the PDF reference).

Very often, it is set for the whole document with the package options knockout (no overprint), and overprint. By default, the overprint mode is 1, but it can be changed with opm=0.

Once set the overprint state for the whole document, you can use something like:

```
{\overprintstate{1}text}
\textoverprint[1]{text}
```

(or 0, or no; default in \textoverprint is 1, except with the package option opm=0).

Since the color stack is used, pdfT_EX \geq 1.40 is required.